

February 8, 2016

North Dakota Public Service Commission Attn: Julie Prescott 600 E. Boulevard, Dept. 408 Bismarck, ND 58505-0480



Dakota Access, LLC
Dakota Access Pipeline Project- Pipeline Terminals
McKenzie, Mountrail and Williams Counties, ND
ND PSC Case No. PU-14-842
Keitu Project No. 567-1099

In accordance with our contract referenced above, Keitu Engineers & Consultants, Inc. (Keitu) is pleased to submit two hardcopies and one electronic copy of the topsoil segregation reports performed for Dakota Access Pipeline Project. Five (5) of the six (6) terminals are complete.

The final terminal site, near Epping ND, had the latest construction start and site inspections are still in progress. Those reports will follow under separate cover.

Keitu appreciates the opportunity to work with you on this project and I hope these reports meet with your approval. If you have questions or comments, please contact me at the phone number above or via email at kspilman@keitu.com.

Kathleen M. Spilman, P.E. Managing Director

Enclosures: Eleven (11) Terminal Topsoil Inspection Reports – 2 hardcopies each

CD ROM electronic format report copies





Case No. PU-14-842 Dakota Access Pipeline Project PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: Stanley Terminal

Date of Inspection: 25 January 2016

Terminal location property consisting of approximately 20 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 9:30 am to 6:00 pm. Weather included cloudy, overcast skies throughout the day. Wind 17-20 mph gusting to 25 mph generally from northwest. Light snow flurries occurred throughout the day with no accumulation. Temperature 23 - 27 °F.

Surface stripping in progress by 3 dozers and 2 scraper operators at Dakota Access owned terminal site. Material and equipment staging occurring at laydown area at location leased by Matrix Inc. including construction equipment assembly. Topsoil was being moved for storage at the southeast corner of the site during end of day departure.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil is being moved for storage at the southeast corner of the site. Topsoil from subsoil segregation appears adequate.

Vegetation Condition

A tree row is present on east side property border. However, it is located outside the property boundary and will reported that it will not be removed. Site is currently a wheat field, no trees present on terminal property.

<u>Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites</u>

Trenching for pipeline installation not yet started. No bore or road crossing underway.

Deficiencies

Perimeter stormwater sediment control measures are not in place yet but minimal snowmelt or precipitation runoff threat. Off-site laydown sites were not previously reported but confirmed with PSC staff such areas are outside scope of Commission's order.

Actions Taken/To Be Taken

Upon initial visit, Keitu inspector informed Site Chief that it appeared dozers were stripping too deep. Upon consulting with a Matrix representative and Site Chief, two small areas had some subsoil mix with the topsoil due to the frozen ground. After consultation, overall proficient segregation on site was demonstrated. Perimeter storm water sediment control measures were not in place at the time of inspection.

<u>Keitu Inspector:</u> RJS <u>Inspection Report Submitted</u>: 3 February 2016



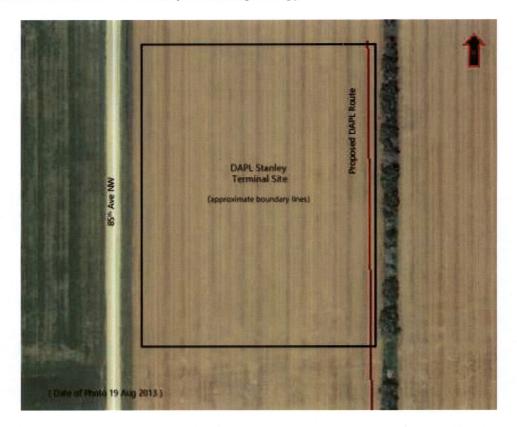
Report Photo #1 "Topsoil Stripping" at GPS Coordinates:

48.305°N 102.45972°W

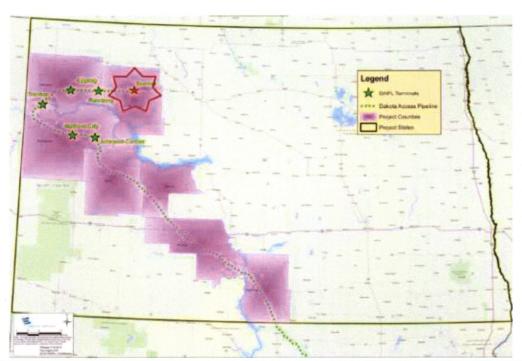


Report Photo #2 "Topsoil Piling on Southeast Side" at GPS Coordinates: 48.302222°N 102.459167°W





Stanley, ND







PU-742-16 Keitu Engineers & Consultants, Inc.

Date of Inspection: 27 January 2016

Site/Project Location: Stanley Terminal

Terminal location property consisting of approximately 20 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 9:15 am to 10:00 am. Weather was sunny with unrestricted visibility. Wind 22-27mph gusting to 30mph from the west. Temperature ranged from 38 to 42°F.

Topsoil piling and subsoil piling was completed upon site visit. Landscaping for future storage tanks was underway. Subsoil was temporarily piled on unstripped, frozen topsoil grounds on south side of site. Subsoil was being transported half mile south of site, then 0.8 miles east per landowner request. Temporary road was created by scraper to access location.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil removal and storage was completed. Storm water management practices have not been implemented although threat from precipitation runoff or snowmelt to area streams is minimal during winter season. Stormwater BMPs to be installed in early stages of construction.

Vegetation Condition

Temporary access road for subsoil piling travels through an existing tree row. However, the road went through a break in the tree row and no trees were removed.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation not yet started. No bore or road crossing underway.

Deficiencies

Temporary storage of subsoil had been piled on top of unstripped frozen topsoil per decision made by site construction manager.

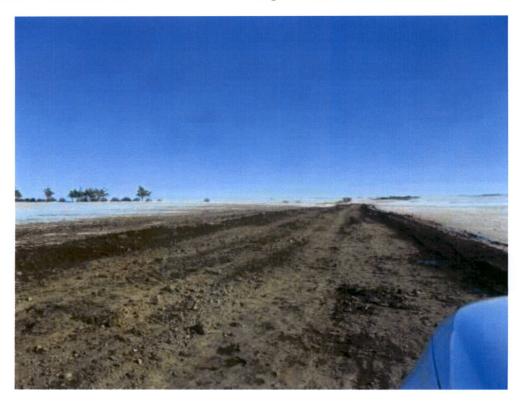
Actions Taken/To Be Taken

Upon visit, Keitu inspector was informed by Site Chief that subsoils were being piled on an offsite location per landowner request. Temporary road was built for access on site and adjacent landowers property to deliver soils to landowner. Unclear whether a PSC permit was granted/necessary for this work. Subsoil piling was halted in the afternoon due to sediments being tracked offsite due to thawing ground.

Keitu Inspector: RJS **Inspection Report Submitted:** 3 February 2016



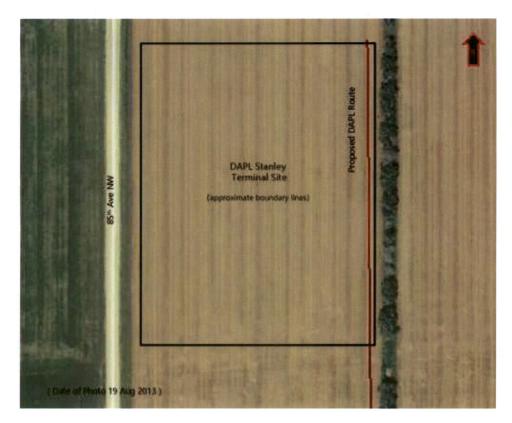
Report Photo #1 "Access Road to Offsite Subsoil Piling" at GPS Coordinates: 48.298194°N 102.455°W



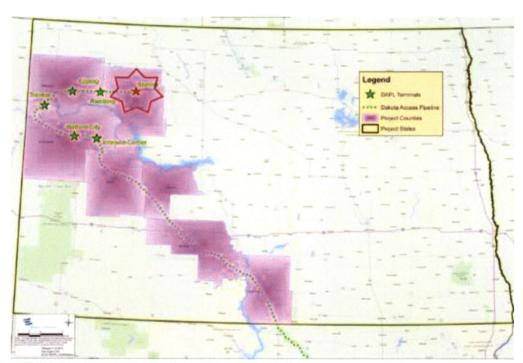
Report Photo #2 "Subsoil Piling on South Side" at GPS Coordinates:

48.302222°N 102.460278°W





Stanley, ND







PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: Ramberg Terminal

Date of Inspection: 25 January 2016

Terminal location property consisting of approximately 38 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 9:20 am to 5:20 pm. Weather included partly cloudy sky cover with early morning haze clearing to unrestricted visibility by mid-morning. Wind 10-13 mph gusting to 15 mph generally from East. Slight snow fall in the morning clearing at 11:00 am. Temperature 20 - 22°F.

Surface stripping in progress by 1 scraper operator and 2 bulldozers with rippers at Dakota Access owned terminal site. Material and equipment staging occurring at laydown area leased by Matrix, Inc. including construction equipment assembly. Topsoil is being pushed to western sides of cuts, southern cut topsoil is then being transferred to western edge of northern cut with intentions of filling in low areas.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil is being moved for storage on western edge of northern cut. At the time of inspection sub soil had not been reached yet. Crews were clearing snow and loose top soil so that frost would be accessible to ripping.

Vegetation Condition

Five trees and shrub row remain along west edge of boundaries of site. Construction crew had said they would not be needing to remove the vegetation.

<u>Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites</u>

Trenching for pipeline installation not yet started. Frost line was determined to be at 18 inches deep. A small crossing was constructed over a drainage ditch pathway on western edge of northern cut. On the west side of the site a soil test hole was dug. Topsoil depth at that location was about 10.5 inches, but difficult to quantify due to frost conditions. No HDD bores scheduled.

Deficiencies

At the time of the inspection perimeter stormwater sediment control measures are not in place but threat of sediment is temporarily low due to freezing conditions. A hydraulic line blew on one of the scrapers. Crew members contained the leak. The site foreman reported a spill kit was on its way and the crew would respond. As of 5:20 departure, arrival of spill kit was still pending. Horizontal fuel tank (2000-gallon capacity) on site without secondary containment installed – but not yet in use.

Actions Taken/To Be Taken

Upon initial visit, site foreman was informed that the construction process was acceptable at this time.

Keitu Inspector: RJM **Inspection Report Submitted:** 3 February 2016



Report Photo #1 "Southern Cut" at GPS Coordinates:

48.2967°N 102.9161°W



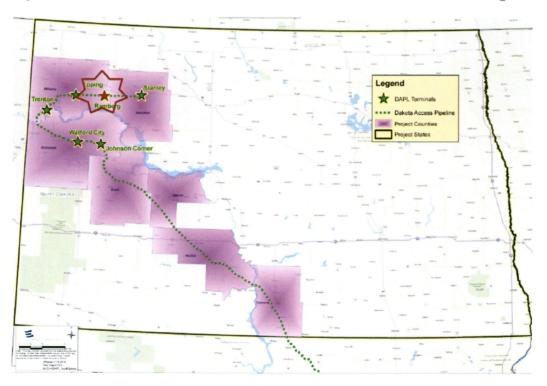
Report Photo #2 "Northern Cut" at GPS Coordinates:

48.2978°N 102.9164°W





Ramberg, ND Terminal





Date of Inspection: 27 January 2016



Site/Project Location: Ramberg Terminal

Terminal location property consisting of approximately 38 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Follow-up inspection performed to identify remediation actions taken to observed deficiencies.

Observed Work / Weather Conditions

Visit occurred between 11:40 am to 12:40 pm. Weather at site was clear skies and unlimited visibility; wind 20-25 mph gusting to 30 mph generally from west. Air temperature 32 – 36 °F.

Surface stripping in progress by 1 dozer operator. Excavator operator removing subsoil and loading 2 dump trucks in operation, moving to western portion of site for stockpile prior to install by 1 dozer operator. Road area for dump trucks had been stripped of topsoil, which was placed in windrows on each site of roadway.

Soil berm had been installed around on-site fuel tank.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil stripped from approximately half of site. Top soil stockpile in northwestern portion of site. Subsoil pile on north central portion of site, stacked on ground stripped of topsoil. Stormwater perimeter berms installed along south and western boundaries to retain stormwater on site. Stormwater retention pond reportedly to be installed at southwestern corner of site, which is consistent with exiting natural topography. Topsoil segregation appears adequate.

Vegetation Condition

Five trees and shrub row remain along west edge of boundaries of site.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Pipeline ROW prep not yet in progress. Site of prior oil spill cleaned up. Oil-contaminated soil in skip box awaiting removal to permitted landfill.

Deficiencies

None noted.

Actions Taken/To Be Taken

None reported.

Keitu Inspector: KMS **Inspection Report Submitted:** 3 February 2016



Report Photo #1 "Containment Berm" at GPS Coordinates:

48.2947°N 102.9164°W



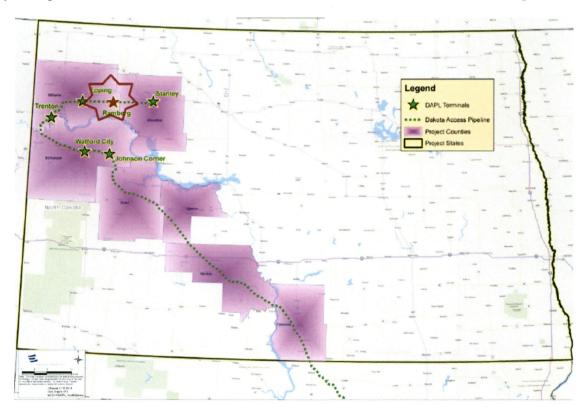
Report Photo #2 "Subsoil Recovery & SW Perimeter Berm" at GPS Coordinates: 48.2939°N 102.9164°W





Project Map Site Location:

Ramberg, ND Terminal





Site Inspection Trip Report

Date of Inspection: 27 January 2016

Case No. PU-14-842 Dakota Access Pipeline Project

PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: Trenton Terminal

Terminal location property consisting of approximately 20 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 8:50 am to 11:38 am. Weather included clear skies with unrestricted visibility. West wind 18-25 mph gusting to 30 mph from SE. No rain or other precipitation. Temperature 31 – 38 °F.

Surface stripping in progress by 3 dozer operators at Dakota Access owned terminal site. Ulteig Engineers land surveyors on-site marking boundaries. Heavy equipment staging along south section of property line including employee vehicles. Office trailers being installed on southwest corner of site. Bell holes along south property line to confirm depth of utility lines and existing pipelines.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil from subsoil segregation appears adequate. Site staff expecting 9 inches of topsoil. Approximately 6 inches of topsoil evident in bell holes dug along south portion of site. Stormwater / sediment control were not yet in place although no signs of runoff / snowmelt flow were noted.

Vegetation Condition

Trees remain along west portion of north property boundary, consistent with historical aerial photo dated September 2014. No evidence of tree or shrub removal noted. But site personnel were under the impression they were to clear the trees at the north property line.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation not yet started. No bore or road crossing underway.

Deficiencies

Some large deep chunks of topsoil were being lifted by the bulldozer equipment, but the warm weather was aiding in separation of topsoil from subsoil. Information provided at the pre-construction meeting indicated no tree/shrub removal was expected, and is not consistent with the information given by site personnel.

Actions Taken/To Be Taken

Site personnel were cautioned to confirm that trees and shrubs had been inventoried prior to removal. PSC staff were advised via email of potential tree/shrub clearing activities.

Keitu Inspector: KMS **Inspection Report Submitted**: 3 February 2016



Report Photo #1 "Topsoil removal as west boundary line" at GPS Coordinates: 46.1122°N 103.7696°W



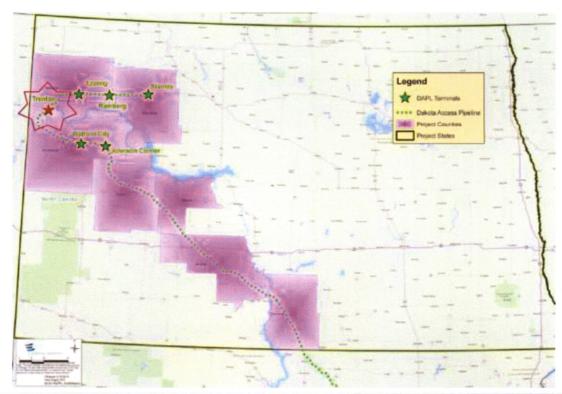
Report Photo #2 "Six (6) Inch Topsoil depth" at GPS Coordinates:

46.1114°N 103.7694°W





Trenton, ND Terminal





Site Inspection Trip Report

Case No. PU-14-842 Dakota Access Pipeline Project PU-742-16 Keitu Engineers & Consultants, Inc.

<u>Site/Project Location</u>: Watford City Terminal

Date of Inspection: 27 January 2016

Watford City Terminal (Terminal) location property consisting of approximately 38 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan (4) restoration activities ongoing consistent with PSC-approved environmental mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 9:00 a.m. to 4:30 p.m. Weather included clear, sunny sky cover with unrestricted visibility. Wind 20-21 mph gusting to 26 mph generally from the west. No rain or other precipitation. Temperature 32 - 36 °F.

Office trailer and equipment staging occurred on the north side of Dakota Access property adjacent to 24^{th} Street. Vegetation was trimmed in a majority of the staging area.

Top Soil Management / Condition

Removed of topsoil was not observed during site visit.

Vegetation Condition

There were no existing trees or shrubs observed in the construction area of the Terminal.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation has not started. The Terminal site has no road crossings, river crossings, or HDD bore sites.

Deficiencies

At the time of the inspection no deficiencies were observed.

Actions Taken/To Be Taken

During the field inspection there was no observed actions to be taken.

Keitu Inspector: KRB

Inspection Report Submitted: 2 February 2016



Report Photo #1 "Site Overview" at GPS Coordinates:

47.760979°N -103.293789°W



Report Photo #2 "Equipment Staging Area" at GPS Coordinates:

47.760979°N -103.293789°W



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Project Map Site Location:

Watford City, ND







Case No. PU-14-842 Dakota Access Pipeline Project PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: Watford City Terminal

Watford City Terminal (Terminal) location property consisting of approximately 38 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface

Date of Inspection: 28 January 2016

disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan (4) restoration activities on-

going consistent with PSC-approved environmental mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 8:00 a.m. to 9:15 p.m. and 1:30 p.m. to 2:00 p.m. Weather included clear, sunny sky cover with unrestricted visibility. Wind 0-6 mph gusting to 14 mph generally from the south southwest. No

rain or other precipitation. Temperature 19 – 46 °F.

Office trailer and equipment staging occurred on the north side of Dakota Access property adjacent to $24^{\rm th}$

Street. Vegetation was trimmed in a majority of the staging area. Sediment collection pond and site BMP's were being constructed. Topsoil was separated and being used for construction of berms. The vegetation stripped from the sediment pond was relegated to the west side of the exposed soil. The central part of the

Terminal site was observed in the afternoon having vegetation stripped.

Top Soil Management / Condition/ Erosion Control

Topsoil was observed being utilized for berms on the southwest area of the site. Topsoil was used for berms

on the edge of the sediment pond. Topsoil separation was ongoing during site visit.

Vegetation Condition

There were no existing trees or shrubs observed in the construction area of the Terminal. Overall vegetation

consisted of non-native grass species.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation has not started. The Terminal site has no road crossings, river crossings,

or HDD bore sites.

Deficiencies

At the time of the inspection no deficiencies were observed. During the site inspection, the Terminal

construction appeared to have sufficient ongoing construction practices.

Actions Taken/To Be Taken

During the field inspection there was no observed actions to be taken. Total topsoil separation had not

commenced during site visit.

Keitu Inspector: KRB

Inspection Report Submitted: 2 February 2016

Report Photo #1 "Topsoil as Berm" at GPS Coordinates:

47.755931°N -103.290264°W



Report Photo #2 "Topsoil Separated" at GPS Coordinates:

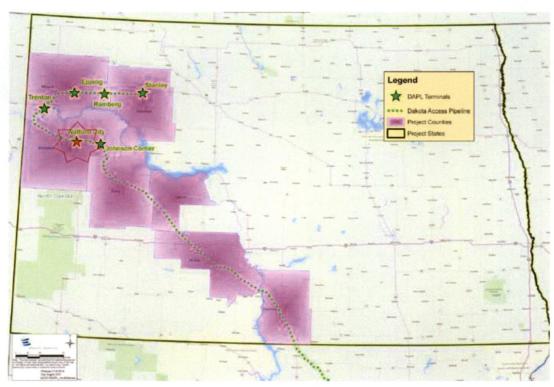
47.755931°N -103.290264°W





Project Map Site Location:

Watford City, ND





Site Inspection Trip Report

Case No. PU-14-842 Dakota Access Pipeline Project

PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: Watford City Terminal

Terminal location property consisting of approximately 38 acres was visited at the start of civil work

Date of Inspection: 29 January 2016

construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3)

vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 10:00 am to 12:00 pm. Weather was clear, sunny sky cover with unrestricted visibility. Wind 10-14 mph with no gusts generally from the west. No rain or other precipitation.

Temperature 38 – 42 °F.

Topsoil stripping was completed and piling was in progress by 2 dozers, 1 scraper, and 7 earth mover

operators at Dakota Access owned terminal site. Material and equipment staging occurred at laydown area at location leased by JMAC Resources including construction equipment assembly. Topsoil was being moved for

storage at south area of the site.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil was being moved for storage at south area of the site. Depth of topsoil stripped averaged about 1

foot. Topsoil from subsoil segregation appears adequate.

Vegetation Condition

No trees were present on site. Overall vegetation consisted of Russian thistle.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation not yet started. No bore or road crossing underway.

Deficiencies

Surface disturbance underway using dozers, scrapers, and earth movers. Perimeter stormwater sediment control measures are not in place. According to JMAC Superintendent, some subsoil may be moved nearby

offsite per landowner request.

Actions Taken/To Be Taken

Upon initial visit, site personnel were cautioned by Keitu inspector to pile subsoils on top of subsoils for

onsite and offsite storage. The Site Chief assured a scraper will be in rotation with the earth movers to keep

sediments from being tracked offsite.

Keitu Inspector: RJS

Inspection Report Submitted: 2 February 2016



Report Photo #1 "Topsoil Piling on South Side" at GPS Coordinates:

47.756111°N 103.291944°W



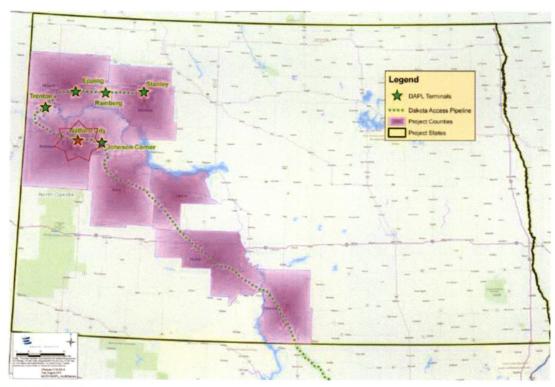
Report Photo #2 "Stripped Ground" at GPS Coordinates:

47.758056°N 103.291111°W





Watford City, ND





Site Inspection Trip Report

Case No. PU-14-842 Dakota Access Pipeline Project PU-742-16 Keitu Engineers & Consultants, Inc.

<u>Site/Project Location</u>: Johnson's Corner Terminal <u>Date of Inspection</u>: 27 January 2016

Terminal location property consisting of approximately 42 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 10:30 am to 4:00 pm. Weather included clear skies with unrestricted visibility. West wind 20-30 mph gusting to 40 mph. No rain or other precipitation. Temperature 34 – 40 °F.

Ulteig Engineers land surveyors on-site marking boundaries. Office trailer was installed on east side of site. Heavy equipment staging along east side of property line including employee vehicles. Snow was removed along the entrance road near the office trailer.

Top Soil Management / Condition / Erosion Control / Stormwater Management

No top soil segregation occurred during the visit. As no ground had been broke, no erosion control or stormwater management practices were needed at this time. Once activity starts, erosion control will be established along the drainage path that runs through the property.

Vegetation Condition

Trees remain in the northwest corner of the site, consistent with historical aerial photo dated August 2013. No evidence of tree or shrub removal noted at this time. Site personnel stated trees and shrubs may need to be removed to build an access road.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation not yet started. No bore or road crossing underway.

Deficiencies

Information provided at the pre-construction meeting indicated no tree/shrub removal was expected, and is not consistent with the information given by site personnel.

Actions Taken/To Be Taken

Site personnel were cautioned to inventory trees and shrubs should they be removed. Site personnel were advised of a couple alternative areas to put access road where trees would not be removed. PSC staff were advised via email of potential tree/shrub clearing activities.

Keitu Inspector: RDK Inspection Report Submitted: 3 February 2016



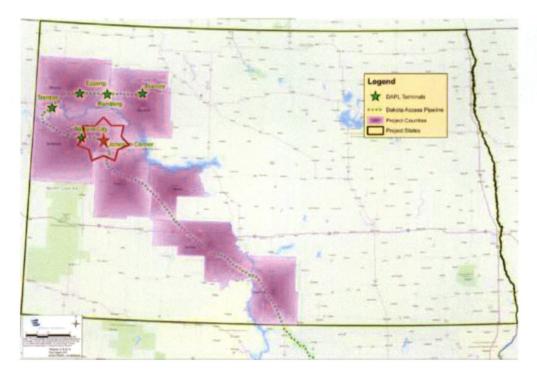


Report Photo #2 "Drainage path running through property" at GPS Coordinates: 47.8012°N 102.9258°W





Johnson's Corner, ND





Date of Inspection: 28 January 2016



Site/Project Location: Johnson's Corner Terminal

Johnson's Corner Terminal (Terminal) location property consisting of approximately 42 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 10:00 a.m. to 1:00 p.m. Weather included clear, sunny sky cover with unrestricted visibility. Wind 0-6 mph gusting to 14 mph generally from the south southwest. No rain or other precipitation. Temperature 19 - 46 °F.

Land surveyors were on-site marking boundaries. Office trailer was installed on the east side of the site. Vegetation stripping was ongoing during site inspection. Material and equipment staging occurred along the east side of the property line including employee vehicle parking. During inspection a second office trailer was delivered and placed adjacent to the existing office trailer.

Top Soil Management / Condition / Erosion Control

No top soil segregation occurred during the visit. No erosion control or stormwater management practices were observed at this time. Once topsoil separation occurs, erosion control will be established along the drainage path that runs through the property.

Vegetation Condition

Trees remain in the northwest corner of the site, consistent with historical aerial photo dated August 2013. No evidence of tree or shrub removal noted at this time. Site personnel stated they will not remove trees and shrubs as originally planned to build an access road.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation has not started. The Terminal site has no road crossings, river crossings, or HDD bore sites.

Deficiencies

At the time of the inspection no deficiencies were observed. During the site inspection, the Terminal construction appeared to have sufficient ongoing construction practices. Site personnel at the time of inspection stated no tree and shrubs will be removed as previously discussed in the earlier site inspection.

Actions Taken/To Be Taken

Site personnel were cautioned to inventory trees and shrubs should they be removed. PSC staff were advised via email of potential tree/shrub clearing activities.

Keitu Inspector: KRB Inspection Report Submitted: 3 February 2016



Report Photo #1 "Stripping Vegetation" at GPS Coordinates:

47.797571°N -102.920917°W



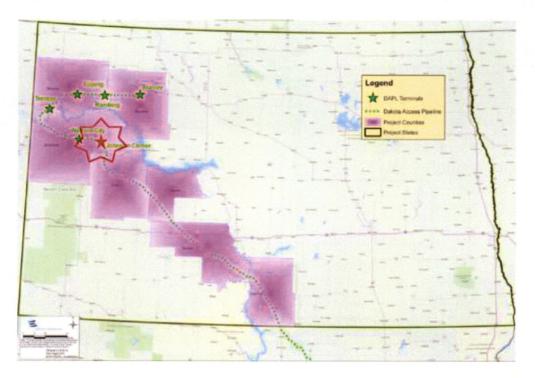
Report Photo #2 "Equipment Staging Area" at GPS Coordinates:

47.797571°N -102.920917°W





Johnson's Corner, ND







Case No. PU-14-842 Dakota Access Pipeline Project PU-742-16 Keitu Engineers & Consultants, Inc.

Site/Project Location: Johnson's Corner Terminal

Date of Inspection: 29 January 2016

Terminal location property consisting of approximately 42 acres was visited at the start of civil work construction. Inspection of terminal construction sites to focus (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 12:40 pm to 1:40 pm. Weather included clear, sunny skies with unrestricted visibility. Wind from the West 10-15 mph with no gusts. No rain or other precipitation. Temperature 42 - 46 °F.

Topsoil stripping was completed and piling was in progress by 2 dozers, 1 scraper, and 2 earth mover operators at the Dakota Access owned terminal site. Material and equipment staging occurred at laydown area at location leased by Matrix, Inc including construction equipment assembly. Topsoil was being moved for storage at northwest area of site. Subsoils will not be moved for storage, as it will be landscaped within stripped ground for future storage tanks.

Top Soil Management / Condition / Erosion Control / Stormwater Management

Topsoil segregation occurred during the visit. Depth of topsoil stripped averaged about 10 inches, ranging from 6 inches to 12 inches, pending the landscape. An earthen berm was constructed around entire stripped ground to prevent sediments from eroding offsite. Top layer of topsoil storage pile appeared to have excessive subsoil mixed in with topsoil.

Vegetation Condition

Trees still remained in the northwest corner of the site. No evidence of tree or shrub removal noted at this time. Site personnel again stated trees and shrubs may still need to be removed to build an access road.

Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites

Trenching for pipeline installation not yet started. No bore or road crossing underway.

Deficiencies

Topsoil segregation from subsoil appeared to be inadequate in a few areas. Subsoil mixing with topsoil seemed unavoidable due to warm weather thawing and softening the bare ground.

Actions Taken/To Be Taken

Site personnel were advised to get approval for any offsite soils that may be brought on to site if more is needed for landscaping. Top layer of topsoil pile may need further examining to deem subsoil mixing with topsoil was not excessive.

Keitu Inspector: RJS **Inspection Report Submitted:** 3 February 2016



Report Photo #1 "Stripped Grounds" at GPS Coordinates:

47.800278°N 102.9225°W



Report Photo #2 "Topsoil Pile" at GPS Coordinates:

47.801389°N 102.923611°W





Johnson's Corner, ND

